augustine, bruce

From: augustine, bruce
Sent: Thursday, January 15, 2015 9:30 AM
To: 'Bajram Nela'
Subject: RE: PES Refinery flaring incident follow-up

Ben,

Please keep me in the loop on the potential enforcement here. Also, I received a 12/2/14 letter from PES indicating that the 37 Boiler exceeded their RACT limit of 495MMBtu/hr of CO for four days in late November. Is AMS planning to take action on these exceedances?

Thanks

Bruce J. Augustine
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USEPA Region III
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(215) 814-2131

From: Bajram Nela [mailto:Bajram.Nela@Phila.gov]
Sent: Wednesday, January 14, 2015 3:54 PM
To: augustine, bruce
Cc: Thomas.Huynh@phila.gov; Edward Braun; Thomas Barsley; kassahun.sellassie@phila.gov
Subject: PES Refinery flaring incident follow-up

Bruce,

I am the AMS FC&E engineering specialist who is assigned to PES. Please see below for Jackie Hom from PES's response to the questions I sent her regarding the flaring incident this past weekend. Also, reading through the incident report, PES did state that the opacity exceedance were for 88 minutes and 82 minutes respectively. But, reading on, they state that *"after 5:30 PM, it became too dark to observe smoke from the flares, although some smoking was likely."* So it seems like the opacity exceedances lasted much longer than 88 minutes and 82 minutes, but they couldn't see because it was too dark. Please let me know if you have any questions. We will continue to update you as new information becomes available. Thank you.

Bajram [Ben] Nela
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Facility Compliance and Enforcement
Air Management Services
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From: HOM, JACQUELINE [JACQUELINE.HOM@pes-companies.com]
Sent: Wednesday, January 14, 2015 2:26 PM
To: Bajram Nela
Cc: BARKSDALE JR, CHARLES D; Kassahun Sellassie; Thomas Barsley
Subject: RE: Followup questions

Ben,

Investigations are ongoing. Prelimarily the cause for the loss of air is suspected to be external corrosion.

There are no other details about the H2S exceedances besides the information stated in the letter. However, perhaps some additional explanation of how steam impacts fuel gas H2S levels would be helpful. Lean amine is used to absorb H2S from fuel gas in various amine contactor locations throughout the refinery. Over time, the amine becomes saturated with H2S (becoming rich amine) and is sent to the amine regenerators to strip off the H2S. (The stripped H2S or acid gas is then sent to the sulfur plant and lean amine is sent back to the amine contactors.) Steam is used in the amine regeneration process in the reboilers at the bottom of the regenerator tower. When steam is not available, amine is not properly regenerated and H2S then cannot be absorbed into the amine from the fuel gas. This caused a significant increase in H2S in fuel gas starting in the 5 PM hour which then led to the exceedance of the limit once the 3-hour average exceeded 162 ppm during the 7 PM hour.

Saturday's flaring events were not acid gas flaring events.

Jackie Hom
Philadelphia Energy Solutions
Environmental Department
215 339 2528

From: Bajram Nela [mailto:Bajram.Nela@Phila.gov]
Sent: Wednesday, January 14, 2015 11:58 AM
To: HOM, JACQUELINE
Cc: BARKSDALE JR, CHARLES D; Kassahun Sellassie; Thomas Barsley
Subject: Followup questions

Jackie,

I'm reviewing the flaring incident report PES sent to us and I have a few more questions. First, did you discover what caused the loss of air? Secondly, PES reported H2S exceedances for 7:00 PM and 8:00 PM, which where 182 ppm and 164 ppm 3-hour averages respectively. Are there any other details regarding the H2S exceedances? Lastly, was there any acid gas flaring and, if so, please provide the duration and details. Thank you.

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